

21. A NOTE ON SOME ENTOMOGENOUS FUNGI ATTACKING PRESERVED DRAGONFLY COLLECTIONS

INTRODUCTION

Fungi are the biggest hazard to insects in preservation cabinets. Several instances of fungal attack on preserved and stored insect material have been reported earlier (Wegstaffe & Fidler 1955; Oldroyd 1963; Ray Chaudhuri *et al.* 1975). It seems, useful to give a brief account of atleast some of the fungi which commonly attack dragonflies dry-stored in collection cabinets and the methods to be effectively used to prevent their appearance within the containers.

OBSERVATIONS

No less than six different species of fungi were obtained on an examination of about 100 dragonfly specimens of either sex and belonging to four (two zygopterans and two anisopterans) species namely *Prodasineura autumnalis*, *Rhinocypha quadrimaculata*, *Trithemis festiva*, and *T. aurora*. The fungus species as recorded on these dragonflies are *Entomophthora destruens*, *Entomophthora* sp., *Mucor* sp., *Spicaria* sp., *Tarichium* sp. No. 1 and *Tarichium* sp. No. 2. The six fungi species are new records as far as their host materials are concerned. It is interesting to note that no two different species of fungi have ever been found together on any individual host, however, the same saprophytic fungus may be found on individuals of many species also.

It was found that the organs and parts usually subject to fungal attack were comparatively feebly chitinized and/or membranous, e.g., intersegmental membranes of the abdomen. Body pores and genitalia were, however,

among the worst affected parts. As a result of such infestation the material becomes brittle losing many parts of taxonomic significance.

CONTROL

The following control methods could be of great use in coping with the fungal growth on dry preserved material in collection cabinets.

1. Drying of the material in the hot sun for atleast six hours for a week.

2. Spraying of powdered Para dichlorobenzene and/or naphthalene along the inner walls of the box.

3. Putting rolls of cotton soaked in Ethyl acetate in the corners of the box.

4. When the infestation is heavy and apparent the specimens can be cleaned by brushing out with a solution of glacial phenol in benzene in the ratio 1:10 or in dilute formaldehyde.

5. The best method to prevent the occurrence of fungus is to put a ball of cotton wool (about an inch in diameter) soaked in carbolic acid and then placing it on a stout pin. When the acid is recrystallized on the cotton wool, then the ball can be pinned in the drawer.

6. Damp and consequent moulds can be checked to some extent by placing a small perforated tin box containing silica jel in each drawer.

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